

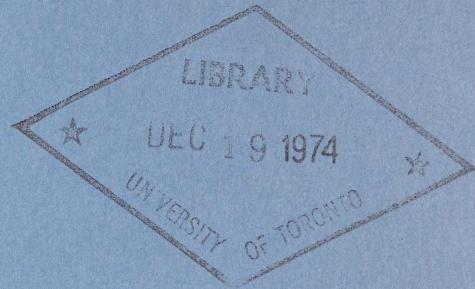
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MEDIUM-TERM
CAPITAL INVESTMENT SURVEY

- 1971 -



by

B. A. Keys
F. G. Thompson
M. Heath

Canada
Economic Council of Canada

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This paper was prepared by members of the staff of the Economic Council of Canada. The views and conclusions contained in it are those of the authors themselves.

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Our appreciation and thanks are extended also to officials of the Department of Industry, Trade and Commerce and a number of their associates for their helpful collaboration again this year on the survey of medium-term business capital investment plans.

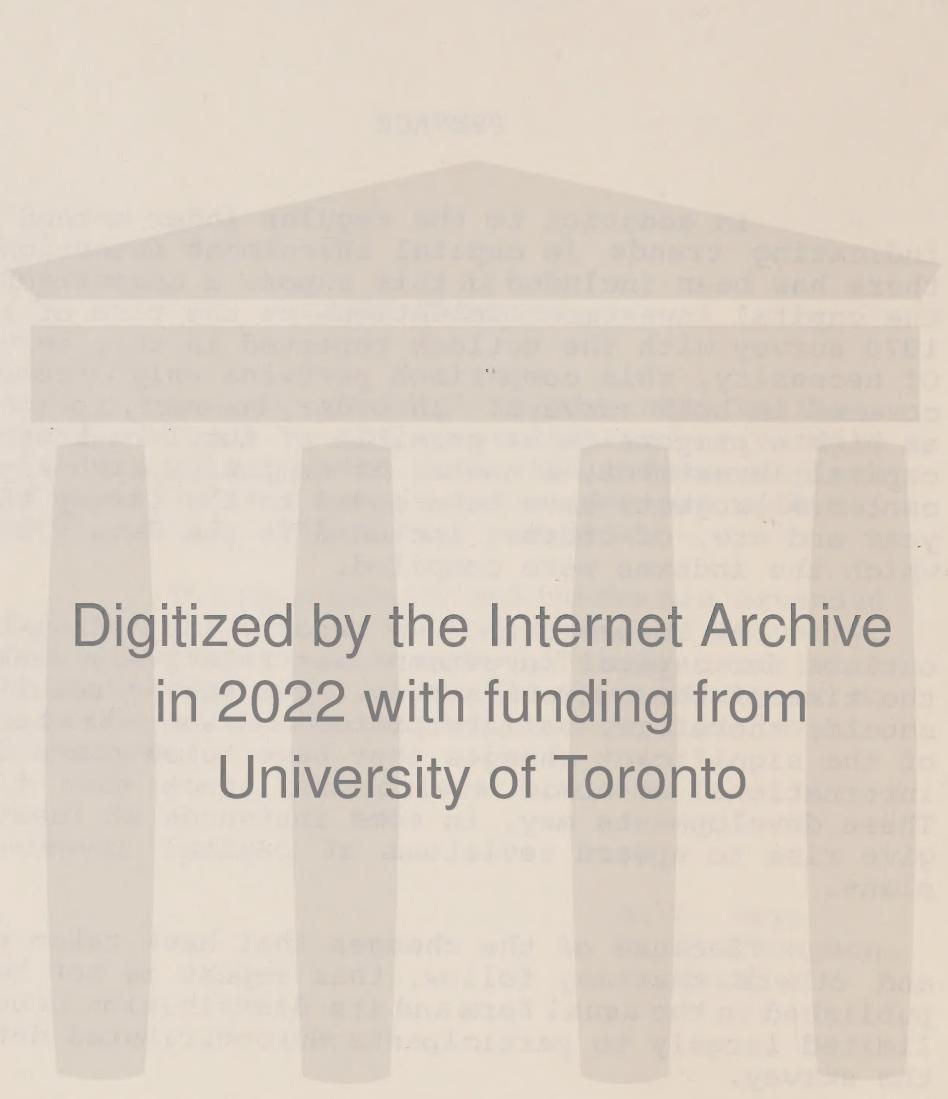
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PREFACE

In addition to the regular index method of indicating trends in capital investment intentions, there has been included in this report a comparison of the capital investment intentions at the time of the 1970 survey with the outlook reported in this survey. Of necessity, this comparison pertains only to companies covered in both surveys. In order, however, to include as high a proportion as possible of total business capital investment, a number of companies with significant new projects have been added to the survey this year and are, of course, included in the data from which the indexes were compiled.

As observed in the report, the medium-term outlook for capital investment was relatively weak at the time of the current survey. The survey results should, therefore, be interpreted with some care because of the significant changes that have taken place in the international economic environment since that time. These developments may, in some instances at least, give rise to upward revisions of capital investment plans.

Because of the changes that have taken place and others that may follow, this report is not being published in the usual form and its distribution is being limited largely to participants who contributed data to the survey.



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HIGHLIGHTS

The following are the principal findings in an interview survey of medium-term (five-year) capital investment intentions of approximately 240 large business firms, universities, and governments, conducted jointly by the Economic Council of Canada and the Department of Industry, Trade and Commerce during early October 1971.^{1/} Not included in the survey were housing, agriculture, and fishing.

Overall capital investment in new construction, machinery and equipment in Canada in 1972 is expected, by the organizations surveyed, to remain at the same level as in 1971. In 1973, overall capital expenditures are indicated to decline from 1971 and 1972 levels.

Business capital investment by the survey firms is projected also to remain at approximately the same level in 1972 as in 1971 but to decline appreciably in 1973. While it has been typical in the results of previous surveys for the index of investment intentions to decline in the latter years of the survey period, it is unusual for a marked decline to be reported as early as the second year of the period under review, and in the current survey the decline through to the end of the five-year period is considerably more pronounced than in previous surveys. In the 1970 survey, the business firms covered were planning increases of almost 9 percent in capital spending in the following year and a small increase over the base year in the second year forward.

^{1/} As this report covers capital investment intentions over a five-year period, during which the cumulative effect of price increases could produce figures that would not be representative of the actual *volume* of planned capital facilities, allowances for price changes have been removed as far as possible from the data used in this report. For this reason, the survey results reported here do not correspond exactly with those reported earlier by the Department of Industry, Trade and Commerce for the joint survey.

Among the business officials who commented during the current survey on the *outlook* for their companies, a substantial majority expect increases in their sales in Canada in 1972 and, where applicable, they anticipate increases in export sales as well. More than one-half of those reporting expect improved profits in 1972.

Almost 60 per cent of the reporting companies indicated they were operating below *capacity* in 1971 and, especially among the manufacturing firms, this condition was expected to continue in 1972. Approximately 50 per cent of the companies in the 1970 survey reported they were operating below capacity at that time.

Concern was expressed again this year by the business officials interviewed over pending Canadian legislation in the fields of taxation, labour relations, and competition policy. A number of them were becoming concerned, too, over the possible effects of recent U.S. economic measures. At the time the survey was conducted in early October, there was little evidence, however, that the new U.S. policies had had significant impact on the capital investment intentions of the survey firms in the relatively brief period since the policies were announced in mid-August.^{1/}

Almost 70 per cent of the new capital facilities being put in place in 1971 were for *expansion* of productive capacity. This proportion is expected to decline to around 66 per cent in 1972 and 1973, with a proportionate increase in expenditures for *modernization and replacement* during the next two years.

Investment in non-residential *construction* by the organizations in the survey is shown to decrease moderately in 1972, and the declining trend is expected to continue rather markedly throughout the survey period. Expenditures on *machinery and equipment* are projected to show a small increase in 1972 and then to decline gradually through to 1976.

^{1/} Some of the U.S. measures such as the import surcharge and the buy-American feature of the investment tax credit have, of course, been rescinded since the time of the survey.

The *regional distribution* of the business capital investment covered in the survey indicates an increase in the proportion allocated to the Prairie Provinces over the 1971-73 period and a decrease to British Columbia. The largest proportion of new facilities to be put in place in 1972 and 1973 is designated for Ontario, followed in order by the Prairie Provinces, Quebec, British Columbia, and the Atlantic Provinces.

Universities project an increase of almost 10 per cent in capital expenditures in 1972, followed by outlays in 1973 and 1974 moderately below 1971 levels. Sharply reduced expenditures are indicated for the remaining two years of the period under review. Marked downward revisions in capital expenditure intentions were made during 1971.

Governments that reported indicate a slight increase of less than 2 per cent in outlays on capital facilities in 1972, a further small increase in 1973, and then gradual declines through to 1976.

CAPITAL INVESTMENT OUTLOOK

Overall survey results show that capital investment is projected to remain at virtually the same level in 1972 as in 1971. Following a similar pattern, at the time of the survey the group of 200 large *business* firms covered did not expect any increase in capital expenditures in 1972 compared with 1971. As mentioned in the Highlights section, the variation between this result and that reported earlier by the Department of Industry, Trade and Commerce for the joint survey is due to the removal, as far as possible, of allowances for price changes from the data before constructing the indexes shown in this report. *Universities* in the survey anticipate an increase of over 9 per cent, while the *governments* that reported, project an increase of around 2 per cent in 1972 over 1971.

The results of the 1971 survey, including the breakdown into industry groups and other types of enterprise, are summarized in index form for the 1970 to 1976 period in the following table. Though 1970 is the latest year for which actual capital investment data were available at the time of the survey, preliminary *actual* figures provided for 1971 are considered to be a more useful base from which to construct the indexes; 1970 figures are shown in appropriate relationship to 1971 in the indexes and are used in the calculation of the degree of coverage by the survey relative to total capital investment in each sector.

INDEXES OF CAPITAL INVESTMENT INTENTIONS*

(1971 = 100)

	1970							Survey Coverage ⁽¹⁾ (1970 Basis)	
		1971	1972	1973	1974	1975	1976	Millions of Dollars	Percentage of Total Sector
Manufacturing -									
Total	104.3	100.0	98.7	97.7	79.8	68.0	66.8	1,560	52
Food & Beverages	108.7	100.0	97.2	87.9	78.1	68.4	54.9	92	30
Pulp & Paper	93.1	100.0	83.9	95.5	76.2	56.6	47.2	415	56
Primary Metals	98.6	100.0	114.5	96.4	61.2	50.6	66.0	330	84
Chemicals	132.8	100.0	109.7	96.3	69.9	36.0	40.2	223	-- (2)
Transportation									
Equipment	174.4	100.0	101.4	135.3	118.3	130.7	104.4	187	73
Other	88.1	100.0	97.0	98.8	101.9	107.8	106.8	313	29
Mining	69.2	100.0	96.5	51.1	29.0	19.7	15.1	598	98
Oil & Gas (3)	84.7	100.0	108.7	111.8	103.3	98.0	96.8	774	-- (5)
Oil & Gas									
Transmission (4)	63.8	100.0	114.4	93.3	87.0	112.2	73.0	291	-- (5)
Transportation									
& Storage	99.9	100.0	86.6	84.1	84.6	84.9	59.0	601	-- (5)
Telecommunications	89.2	100.0	108.5	112.0	117.5	120.8	124.0	707	91
Power Utilities	95.1	100.0	90.7	90.1	92.6	96.8	105.7	1,600	100
Trade, Finance and									
Other Commercial	89.4	100.0	114.6	107.6	94.9	71.7	60.8	266	16
Total Business	90.0	100.0	99.6	93.9	87.5	86.0	81.1	6,397	64
Universities	94.2	100.0	109.5	95.7	95.6	73.7	61.0	235	64
Governments	83.0	100.0	101.9	105.7	99.6	94.0	89.6	2,999	-- (5)
Survey Total	87.8	100.0	100.6	97.9	91.7	88.3	83.2	9,631	55
Organizations Included	239	241	241	230	226	219	205		

* As far as possible, allowances for price changes were removed from the reported data before constructing the foregoing indexes. As noted earlier, this accounts for the difference between business capital investments for 1972 that are reported in this publication and those reported earlier by the Department of Industry, Trade and Commerce for the joint survey. Fuller commentary relating to price changes appears in the Appendix.

Note: Because the number of organizations providing estimates is not constant throughout the period, the index numbers have been built up from overlapping year-to-year comparisons rather than from simple totals. The figures used for any given year cover the same firms as in the immediately preceding year. Thus, although the coverage of the index is narrower in certain years, there is no distortion arising from lack of figures for some organizations.

(1) Survey coverage indicates the extent to which the survey data represent the total investment for each sector. To obtain the ratios, dollars reported in this survey for 1970 are compared with dollars of capital expenditures reported for the sector for that year in *Private and Public Investment in Canada: Outlook 1971, Mid-Year Review*, Catalogue No. 61-206 (Ottawa: Information Canada, 1971). The dollar data provide, as well, an indication of the weighting of each sector in the total indexes.

(2) Does not include petrochemicals.

(3) Includes production and refining.

(4) Includes pipelines and distribution.

(5) Not comparable with *Private and Public Investment in Canada*.

These capital investment intentions for 1972, followed by quite sharp declines, especially among the business firms, in 1973 and for the balance of the survey period, represent a substantially weaker investment outlook than obtained in any previous capital investment survey conducted by the Economic Council of Canada. As emphasized in previous capital investment reports, the data provided to us in the survey should not be regarded as firm forecasts of *actual* expenditures, but rather as the *intentions* of the various organizations at the time of the survey. As noted elsewhere in this report, concern and uncertainty, in connection with events both in Canada and elsewhere, were particularly prevalent at the time of this year's survey. Our experience to date with capital investment surveys indicates also that investment projections are sensitive to changes in the business and economic outlook and subject to substantial alteration. It is rather evident, however, that if, as pointed out in the Council's recent publication *Performance in Perspective, 1971*,^{1/} full and productive employment is to be provided through to 1975 for Canada's rapidly growing labour force, the levels of capital investment in plant and equipment projected in the current survey are inadequate.

A new feature of this report is the provision of data to permit a comparison of the investment intentions in the 1970 survey with the current outlook. For this purpose, in addition to *indexes*, the proposed *dollar* expenditures are shown for business capital investment, in total and by sector, for 1971, 1972, and 1973, from the 1970 survey as well as from the current one. This is designed to provide a measure of the extent to which investment plans were altered during the course of the past year -- information that is not revealed in the index form of presentation. So that comparisons will be meaningful, the dollar figures pertain to companies common to the two surveys; i.e., they are produced on a matched sample basis for the 1970 and 1971 surveys. In a number of sectors, however, companies were added to, or dropped from, the survey this year. The figures from the 1970 survey which were adjusted at that time to 1970 dollars have been inflated to 1971 values. Since the *indexes* reflect data received from *all* organizations covered in the survey, in some instances they indicate somewhat different trends than the *dollar* figures that relate to *matched* samples.

^{1/} Economic Council of Canada, *Performance in Perspective, 1971* (Ottawa: Information Canada, 1971), p. 26.

The following table presents dollar data for a matched sample of 155 firms, out of the total of 200 companies surveyed. As noted above, this form of presentation displays the realization of investment plans for 1971 and the degree of modification, during the past year, of investment plans for 1972 and 1973 as well as for 1971.

Total Business

Capital Investment Intentions of matched sample of firms - 155
(Millions of constant 1971 dollars)

	1971	1972	1973	Total
1970 Survey	6,358.8	5,958.8	5,538.1	17,855.7
1971 Survey	5,830.1	6,042.8	5,718.4	17,591.3

These figures indicate that capital investment intentions for 1971 were revised downward during the past year by more than 7 per cent, from approximately \$6.4 billion at the time of the 1970 survey to a preliminary actual investment of around \$5.8 billion at the time of the current survey. Upward revisions are shown for 1972 and 1973, but the total for the three-year period remains lower in the 1971 survey than was planned one year earlier. It will be noted that whereas the *index* of capital investment intentions for all 200 firms surveyed indicates no increase in planned capital expenditures in 1972, compared with 1971, the *dollar* figures for the 155 firms in the matched sample show a planned increase from \$5.8 billion in 1971 to \$6.0 billion in 1972, or around 3.5 per cent. These outlays for 1972 are, however, still below the \$6.4 billion planned for 1971 at the time of the 1970 survey.

It will be noted later in this report that on a matched sample basis, a number of the individual sectors project a quite different capital investment pattern than that indicated by the entire group of companies in the survey. Further comment in this connection is made in the discussion of the individual sectors.

As illustrated in the Appendix, capital investment by all the business firms covered in this survey amounted to about 65 per cent of all business capital investment by the sectors surveyed. Excluded from coverage were housing, agriculture, and fishing. In total, the organizations in this survey accounted for around 55 per cent of all private and public investment in Canada in 1970.

Main Purposes of Proposed Business Investment

The following table shows, for the companies that reported the information, the breakdown of their projected capital expenditures into the different purposes for which the proposed new facility was intended. Since projected business capital expenditures fall off substantially by 1974, the breakdown by main purpose is shown only through 1973. It should be noted that for some capital projects, the differentiation between expansion and modernization/replacement would be difficult to make and that, in some instances, new investment for the purpose of modernization and/or replacement of existing facilities can be expected to provide increased capacity. As a result, this data may be more meaningful for identifying trends or shifts in purpose than for providing an accurate breakdown, by purpose, of the proposed investment.

Over 80 per cent of the companies in this year's survey reported the purpose for which the new facilities were planned, whereas less than 70 per cent did so last year.

	Modernization and Expansion Replacement Services						Research and Development	Pollution Abatement	Other	Total	Number of Firms Reporting*
	(Per cent)										
1971	69.6	21.1	1.1	0.8	2.4	5.0	100.0				164
1972	66.3	23.2	1.3	0.6	2.5	6.1	100.0				164
1973	65.0	23.8	1.4	0.4	2.7	6.8	100.0				147

*Out of a total of 200 business firms surveyed.

Almost 70 per cent of the 1971 investment in new capital facilities by the business firms reporting in the survey was designated directly for expansion of productive capacity. Similar to the trend in the 1970 survey, this proportion is indicated to decline over the next two years to 65 per cent in 1973. Most of the balance of investment is intended for modernization and replacement, which is expected to increase moderately during the period. This suggests that, on the basis of capital expenditures planned at the time of the survey, some shift in emphasis is continuing to take place away from the installation of new facilities to the modernization of existing ones. A decline of 50 per cent is indicated from 1971 to 1973 in the proportion of capital investment designated for research and development facilities. Other categories remain little changed from the 1970 survey.

A more detailed report of this information by industry group is shown in the Appendix of this report.

Rate of Capacity Utilization

Using their own definition of capacity, which in most cases seems to be the operating level beyond which additional capital facilities would be planned, about two-thirds of the firms in this year's survey were able to provide information on this subject. Approximately 60 per cent of the reporting companies indicated they were operating below capacity in 1971 -- a number of them as low as 60 per cent. Two-thirds of the manufacturing firms reported excess capacity with the condition about equally prevalent throughout the different manufacturing industries. Some improvement is expected in 1972, especially among the nonmanufacturing firms, but over one-half of the manufacturing firms that reported anticipate excess capacity to persist during 1972. It will be seen, however, that in a number of sectors such as telecommunications and power utilities that typically make large capital expenditures, little or no excess capacity was reported. It may be observed, too, that in some sectors a degree of excess capacity will exist at all times and be regarded as normal.

Business Outlook

As the survey was conducted during the early part of October, almost all of the interviews had been completed prior to the presentation of the budget of October 14, 1971. At the time of the survey, the majority of the businessmen who expressed a view anticipated an improvement in business conditions in 1972. A considerable number did not, however, express an opinion on this subject. Questions on the outlook for their own sales and profits received a greater response. A substantial majority expect increases in 1972 in their sales in Canada and, where relevant, a considerable number of those interviewed look for increases in export markets also. Approximately one-half of the respondents reported improved profits for 1971, and an increased number anticipate further gains in 1972. The point was made often, however, that these improvements represented a return from inadequate levels to more normal rates of profit.

Concerns

Concern and uncertainty were expressed frequently about the new tax legislation, labour legislation, and competition policy being planned for Canada. There were indications that some firms had modified their investment intentions as a result.

Additional concern and uncertainty were mentioned, a number of times, over the duration and possible effects of the U.S. economic measures introduced in mid-August. Even among companies that did not expect to be affected directly by the U.S. actions, there was uneasiness over their possible adverse effects on customers of the survey companies and on the Canadian economy in general. Some businessmen suggested, on the other hand, that benefits might accrue to Canada from improvements that the measures might effect on the U.S. economy. There was little indication that capital investment intentions had been modified significantly in either direction at the time of the survey as a direct result of the U.S. measures.^{1/}

Other concerns included apprehension over increased foreign competition in Canada as a result of the U.S. surcharge, over international monetary conditions, availability of funds for large projects, and government policy on imports and foreign investment.

Regional Distribution of Business Investment

The regional distribution of the facilities represented by the capital expenditures planned by business firms is shown in the following table. Because projected outlays decline substantially by 1974, the regional allocation is shown only through 1973. It will be noted that only a few firms were unable to provide this regional information.

	Atlantic Provinces	Quebec	Ontario	Prairie Provinces	British Columbia	Yukon and N.W.T.	Un-allocated	Total	Number of Firms Reporting*
	(Per cent)								
1971	7.6	17.4	35.2	15.3	18.9	1.9	3.7	100.0	185
1972	8.2	17.2	37.8	17.3	14.1	1.7	3.7	100.0	186
1973	7.7	16.4	37.5	19.5	12.3	2.1	4.5	100.0	170

*Out of a total of 200 business firms surveyed.

^{1/} Some of the U.S. measures such as the import surcharge and the buy-American feature of the investment tax credit have, of course, been rescinded since the time of the survey.

Among the survey companies reporting a regional breakdown of planned investment, the largest proportion--around 37 per cent -- is designated for Ontario in 1972 and 1973, followed in order by the Prairie Provinces, Quebec, British Columbia, and the Atlantic Provinces. A substantial increase in the proportion of capital investment in 1972 and 1973, compared with 1971, is indicated for the Prairie Provinces, returning this region closer to proportions shown in earlier surveys. A marked decline is noted in the proportion reported for British Columbia, but the percentage for 1971 was considerably higher than the average of recent years. Consistent with the foregoing pattern, the largest percentage increase in capital expenditures by the reporting firms in 1972, relative to 1971, is projected for the Prairie Provinces. In British Columbia, the level of capital investment by reporting firms is indicated to be lower in 1972 than in 1971.

In dollar terms, total business capital investment over the next two years by the companies reporting is estimated at \$12.2 billion, allocated as follows: \$4.6 billion to Ontario, \$2.2 billion to the Prairie Provinces, \$2.1 billion to Quebec, \$1.6 billion to British Columbia, \$1.0 billion to the Atlantic Provinces, and the balance to the Yukon, the Northwest Territories, or unallocated.

Construction vs. Machinery and Equipment: Survey Total

A breakdown of overall survey results between construction, and machinery and equipment is shown in the following table. This is the first of these surveys in which a sufficient number of governments provided this breakdown for their data to be included with business firms and universities in the indexes of construction, and machinery and equipment.

	1970	1971	1972	1973	1974	1975	1976
<u>1971 = 100</u>							
Construction	85.2	100.0	98.6	96.4	88.0	85.0	81.2
Machinery and Equipment	92.1	100.0	103.8	100.2	97.7	93.9	86.7

On the basis of these indexes, the outlook for capital investment in construction is weaker than in machinery and equipment. Expenditures on construction

are projected to be lower in 1972 than in 1971 and to decline throughout the survey period. Outlays for machinery and equipment are expected to be about 4 per cent higher in 1972 and then to drop off gradually through to 1976. As stressed in previous reports, however, the breakdown between construction and machinery proves difficult for some organizations and, at times in the past, the survey results have not been completely representative of activity in the separate components of construction and of machinery and equipment. In an attempt to compensate for the relatively few organizations that were unable to provide this breakdown in the current survey, an average of the subdivision between construction and machinery for the sector represented has been used for those organizations in the above indexes. This is a new procedure in this report; further comment on it is to be found in the Appendix.

On the foregoing basis, at the time of the current survey, expenditures on construction by all the organizations covered were estimated at \$6.8 billion in 1971 out of a total construction expenditure forecast of \$12.8 billion as reported in *Private and Public Investment in Canada (PPI)*.^{1/} Expenditures on new machinery and equipment by these organizations were estimated at \$4.2 billion for 1971 out of a total investment in machinery and equipment of \$6.8 billion (PPI).

As pointed out earlier, housing was not covered in this survey.

Review of Principal Sectors

The following review of individual industries and sectors indicates that, at the time of the survey, the only significant increases in business capital expenditures being planned for the next two to three years were in Transportation Equipment, Oil and Gas, Telecommunications, and in the Trade, Finance and Other Commercial category. The medium-term investment outlook is relatively weak in most of the other sectors surveyed, though a few such as Primary Metals, Chemicals, and Oil and Gas Transmission show planned increases in capital outlays in 1972.

^{1/} Based on data from Statistics Canada (formerly Dominion Bureau of Statistics); and Department of Industry, Trade and Commerce, *Private and Public Investment in Canada: Outlook 1971, Mid-Year Review*, Catalogue No. 61-206 (Ottawa: Information Canada, 1971).

Among the universities surveyed, increased expenditures are planned for 1972, followed by investment in 1973 and 1974 at close to 1971 levels, then dropping off sharply towards the end of the five-year period covered in the survey.

The reporting governments indicate a moderate increase in spending on capital facilities in 1972 and 1973, followed by steady year-to-year declines for the balance of the period.

In accordance with the procedure followed in recent capital investment surveys, this report shows the degree of coverage, where possible, of the capital investment anticipated by the various groups covered in the survey in relation to total capital investment in Canada for each group, as reported in *Private and Public Investment in Canada*. For four industries -- Chemicals, Oil and Gas, Oil and Gas Transmission, and Transportation and Storage -- a different grouping of the companies or part of their operations is used in this survey than in PPI, and a comparison of the results is not meaningful.

As explained in one of the footnotes to the table of indexes near the beginning of this report, the indexes are constructed from overlapping year-to-year comparisons and make provision for fewer organizations reporting towards the end of the period. A complete summary of the indexes is presented in the Appendix.

Manufacturing - Total

A. Index of Capital Investment Intentions of all firms reporting - 91
(1971 = 100)

	1970	1971	1972	1973	1974	1975	1976
Construction	109.5	100.0	75.8	91.2	49.9	40.5	36.8
Machinery & Equipment	102.1	100.0	108.4	100.6	92.4	79.6	79.6
Total	104.3	100.0	98.7	97.7	79.8	68.0	66.8

B. Capital Investment Intentions of matched sample of firms - 72*
(Millions of constant 1971 dollars)

	1971	1972	1973	Total
1970 Survey	1,387.7	1,273.7	1,165.1	3,826.5
1971 Survey	1,024.7	1,149.3	1,099.6	3,273.6

* See description of matched sample on page 7. Note also that while the upper table (A) presents data in usual *index* form for the *current* survey, the lower table (B) presents a comparison of current data with data from the survey *one year earlier*, in *dollar* form.

This sector comprises all the manufacturing companies covered in the survey. Separate indexes, data, and discussion follow for the individual manufacturing industries into which total manufacturing is subdivided.

Capital expenditures by the 91 manufacturing companies surveyed are expected to amount to \$1.5 billion in 1971. From section A of the foregoing table it is seen that this represents a modest decrease for this group of firms from 1970 levels; further small declines are projected in 1972 and 1973 with a substantial drop-off in 1974, 1975, and 1976. The declines are consistently more pronounced in construction than in machinery and equipment. On the basis of data provided in *Private and Public Investment in Canada*, in 1971 the total group of manufacturing firms in the survey represented around 52 per cent of the capital expenditures of all manufacturing firms in Canada.

Section B of the table indicates that 72 of the manufacturing firms were covered in both the 1970 and 1971 surveys. Among these firms, capital investment intentions for 1971 were revised downward during the year by almost 30 per cent -- from around \$1.4 billion, as reported in the 1970 survey, to a preliminary actual expenditure of just over \$1.0 billion reported in the current survey. Downward revisions have also been made for 1972 and 1973, leaving the outlook at present for the three-year period at expenditures of \$3.3 billion, compared with intentions expressed a year earlier of \$3.8 billion for the same three-year period. An increase in expenditures is planned, however, by this group of companies in 1972 as compared with 1971. The reviews of individual manufacturing industries that follow will indicate the sectors in which modifications of capital investment intentions were most marked during the period between the 1970 and 1971 surveys.

In the breakdown of capital expenditures by *purpose* for the entire group of manufacturing firms surveyed, the proportion allocated for expansion of output is expected to decline from 57 per cent in 1971 to just over 50 per cent in 1972 and 1973. The share of investment assigned to pollution abatement is seen to decrease as well, while increased proportions are projected for modernization and replacement, and for service facilities.

Of the 81 manufacturing firms that provided information regarding *capacity*, two-thirds of them reported that they had excess capacity in 1971; a few, as much as 40 per cent. Some improvement in operating rates was expected in the coming months but over one-half of these firms anticipated unused capacity during 1972.

A substantial majority of the manufacturing firms expect *sales* increases in 1972 and 1973 in domestic markets and, where applicable, in export markets. At the time of the survey, most of them were anticipating improved *profits* as well during the next two years. Especially among this group of firms, concern was expressed over the possible effects of recent U.S. economic measures and over pending Canadian legislation relating to taxation, and labour and competition policies.

Manufacturing - Food and Beverages

A. Index of Capital Investment Intentions of all firms reporting - 7 (1971 = 100)

	1970	1971	1972	1973	1974	1975	1976
Construction	129.4	100.0	81.4	78.1	65.6	58.5	41.2
Machinery & Equipment	99.8	100.0	103.9	92.1	83.5	72.6	61.2
Total	108.7	100.0	97.2	87.9	78.1	68.4	54.9

B. Capital Investment Intentions of matched sample of firms - 7 (Millions of constant 1971 dollars)

	1971	1972	1973	Total
1970 Survey	102.1	88.4	70.1	260.6
1971 Survey	84.3	81.9	74.1	240.3

The survey covered seven large companies in the food and beverage industry, representing meat packers, food processors, brewers and distillers. This industry is comprised of a large number of companies, and the capital expenditures of the survey firms represented only about 30 per cent of capital investment for the entire industry in 1970. As a result of this relatively low degree of coverage, the survey results may not be representative of the entire industry and should be viewed accordingly.

In 1971, capital expenditures as reported by the seven survey companies were expected to total \$84.3 million, down considerably from 1970 levels. A further moderate decline is anticipated in 1972, followed by substantial decreases progressively through to 1976. Similar to the pattern for the overall manufacturing sector, declines are markedly more pronounced in construction than in machinery and equipment.

In the food and beverages industry, the same firms were covered in both the 1970 and 1971 surveys and, as a result, the dollar figures in section B of the table correspond with the index figures in section A. It will be noted from the former that, during the past year, capital expenditure plans were revised downward substantially for 1971 and to a lesser extent for 1972. Plans

were revised upward for 1973, but the three-year total remains considerably below the level projected in the 1970 survey.

However, indications are that, particularly in 1973, an increased proportion of capital investment -- around 65 per cent -- will be devoted to expansion, compared with about 60 per cent in 1971. Corresponding reductions are projected in outlays for modernization and replacement and for pollution abatement.

Consistent with the rather weak outlook for capital expenditures in this industry, most of the firms reported operating below *capacity* in 1971 and expected this condition to continue in 1972.

The general outlook among the firms reporting was for increased *sales* and improved *profits* in both 1972 and 1973.

Manufacturing - Pulp and Paper

A. Index of Capital Investment Intentions of all firms reporting - 31 (1971 = 100)

	1970	1971	1972	1973	1974	1975	1976
Construction	70.7	100.0	60.9	106.9	51.2	38.5	33.1
Machinery & Equipment	106.9	100.0	98.0	87.8	92.2	68.2	56.1
Total	93.1	100.0	83.9	95.5	76.2	56.6	47.2

B. Capital Investment Intentions of matched sample of firms - 21 (Millions of constant 1971 dollars)

	1971	1972	1973	Total
1970 Survey	283.7	288.7	317.9	890.3
1971 Survey	248.5	251.0	251.8	751.3

The 31 companies covered in this survey are, for the most part, producers of pulp and paper; a few produce lumber and other wood products. Capital investment by these companies in 1970 represented an estimated 56 per cent of the total investment by the pulp and paper and forestry industries. In 1971, the 31 companies surveyed planned capital expenditures of \$446.4 million,

up about 7 per cent from 1970. For the balance of the period through to 1976, the outlook is for declines in outlays to well below 1971 levels. Except for 1973, weakness is particularly pronounced in projected expenditures on construction.

The matched sample of 21 companies covered in both the 1970 and 1971 surveys presents a rather different pattern of planned investment. Projected expenditures for 1971, 1972, and 1973 were cut back very appreciably during the past year but are expected to remain essentially at 1971 levels for the two following years. With some exceptions, these firms have cut back on expansion plans, or postponed them to 1973 or later, while maintaining the level of investment necessary for modernization or replacement. The firms added to the survey this year were involved largely in the construction of new mills. Capital outlays on these new facilities reached a peak during the past year and are expected to decline sharply in 1972, as reflected in the index relating to all companies surveyed. Thus, in this industry, planned capital expenditures for the 1971 to 1973 period have tended to shift somewhat from older established firms to new companies entering the field with new pulp and paper mills. This trend is also evident in the breakdown of capital investment by purpose.

In 1971, over 50 per cent of expenditures were for expansion, with the proportion dropping sharply to just over 40 per cent for 1972 and returning to around 49 per cent in 1973. In the same period, outlays for modernization and replacement increased markedly, from around 32 per cent of total investment in 1971 to over 45 per cent in 1972 and to 40 per cent in 1973. Expenditures on pollution abatement are shown to decline from over 11 per cent of total in 1971 to around 7 per cent by 1973, at least part of which may be due to the incorporation of pollution control features as an integral part of new plants and equipment.

Fewer than one-half of the companies were operating at *capacity* in 1971, but just over 60 per cent, including new establishments, expect to utilize their full capacities in 1972.

Most of the officials interviewed in this industry are looking forward to increased *sales* in both domestic and export markets in 1972 and to some improvement in *profits* (or a reduction in *losses*). They expressed concern, nevertheless, over the effect of the exchange rate on the Canadian dollar, and about U.S. price

controls, in the face of continually increasing operating costs, particularly for labour, and expenditures for the control of pollution. Concern was voiced also over the higher effective taxation rates in Canada for companies operating in an internationally competitive industry. Some mention was made, too, of the unsettling effects of various government incentives to attract new capacity at a time when existing mills were experiencing difficulty in providing adequate funds for modernization requirements.

Manufacturing - Primary Metals

A. Index of Capital Investment Intentions of all firms reporting - 12 (1971 = 100)

	1970	1971	1972	1973	1974	1975	1976
Construction	173.6	100.0	129.9	111.5	53.7	51.1	82.4
Machinery & Equipment	87.5	100.0	112.2	94.2	62.3	50.6	63.6
Total	98.6	100.0	114.5	96.4	61.2	50.6	66.0

B. Capital Investment Intentions of matched sample of firms - 12 (Millions of constant 1971 dollars)

	1971	1972	1973	Total
1970 Survey	508.0	415.6	300.4	1,224.0
1971 Survey	336.6	385.2	324.5	1,046.3

The companies in the survey are engaged in the manufacture of primary aluminum, steel, and base metal products. Their capital outlays in 1970 represented 84 per cent of the total investment by the primary metals industry.

Capital expenditures in 1971 by the survey firms were estimated at \$337 million, up slightly from 1970; and an increase of around 14 per cent is planned in 1972, with the largest increase projected for expenditures in construction. Sharp declines are indicated for most of the balance of the five-year survey period.

The dollar figures reveal that capital expenditures were cut back during the past year by about one-third for 1971 and substantially for 1972 as well. While plans for 1973 were modified upwards during the year,

total planned outlays for the three-year period, 1971 to 1973, are well below projections of a year earlier.

The proportion of total capital investment allocated to expansion of facilities is expected to decline from about 68 per cent in 1971 to 65 per cent in 1972, and just over 60 per cent in 1973. A decline is projected also in the proportion of investment for the purpose of pollution abatement. Corresponding increases from 19 per cent to 26 per cent are indicated for modernization and replacement, and from 2 per cent to around 3 per cent for service facilities.

Most of the companies expect domestic sales to increase in 1972 and 1973, but fewer of them anticipate increased export sales or improved profits. This is one of the industries particularly concerned over the possible effects of changes in U.S. economic policies.

Manufacturing - Chemicals

A. Index of Capital Investment Intentions of all firms reporting - 8 (1971 = 100)

	1970	1971	1972	1973	1974	1975	1976
Construction	140.1	100.0	76.3	79.2	41.2	13.1	9.6
Machinery & Equipment	123.0	100.0	155.3	119.8	112.5	70.7	88.1
Total	132.8	100.0	109.7	96.3	69.9	36.0	40.2

B. Capital Investment Intentions of matched sample of firms - 5 (Millions of constant 1971 dollars)

	1971	1972	1973	Total
1970 Survey	86.0	80.1	65.6	231.7
1971 Survey	53.6	81.1	74.1	208.8

The eight companies that participated in the survey are major chemical manufacturers. Their capital investment figures cannot be related directly to data in *Private and Public Investment in Canada*, but it is estimated that coverage by the survey represents a substantial proportion of the total capital investment in the chemical industry, exclusive of the petrochemical operations of the oil refining companies that are included in this report under Oil and Gas.

The survey firms plan to spend \$168 million in 1971, down substantially from 1970. A modest increase of about 10 per cent is estimated for 1972, but investment intentions decline then to very low levels in the latter years of the survey period. Planned investment in construction is particularly weak.

In the matched sample of five companies that were covered in both the 1970 and 1971 surveys, it will be noted that planned expenditures for 1971 were cut back from \$86 million to \$53.6 million -- over 35 per cent -- during the past year. While a projected increase for 1973 indicates that some projects may have been deferred rather than cancelled, the three-year total for 1971 to 1973 is considerably reduced from one year ago. These five companies are planning substantially increased expenditures in 1972 over the reduced levels in 1971, but the projection for 1972 still falls below the level planned a year ago for 1971.

A substantial proportion -- around 75 per cent -- of the capital investment in 1971 was designated for expansion, and the proportion is expected to remain around 70 per cent for the next two years. Increases are projected for service facilities, research and development and, especially in 1972, for pollution abatement.

Five of the companies reported operating below capacity in 1971 and do not anticipate much change in 1972. Those which responded expect, however, that both domestic and export sales will increase and that profits will improve in 1972 and 1973.

Concern was expressed during the survey over the lack of protection provided for the Canadian chemical industry against imports of synthetic textiles and some other chemical products.

Manufacturing - Transportation Equipment

A. Index of Capital Investment Intentions of all firms reporting - 6 (1971 = 100)

	1970	1971	1972	1973	1974	1975	1976
Construction	148.2	100.0	135.7	186.1	108.3	213.8	103.2
Machinery & Equipment	178.3	100.0	96.3	127.8	119.3	121.0	104.3
Total	174.4	100.0	101.4	135.3	118.3	130.7	104.4

B. Capital Investment Intentions of matched sample of firms - 4 (Millions of constant 1971 dollars)

	1971	1972	1973	Total
1970 Survey	64.5	39.5	37.4	141.4
1971 Survey	41.6	39.2	55.7	136.5

The six firms surveyed in the transportation equipment field are largely manufacturers of automobiles and aircraft, or aircraft components. The outlook for capital investment was considerably more buoyant among the automobile firms than the aircraft firms. In 1970, their combined capital expenditures represented 73 per cent of the transportation equipment industry, as reported in *Private and Public Investment in Canada*.

In 1971, the companies in the survey expected to spend around \$108 million -- down very substantially from 1970 expenditures, as had been anticipated in the 1970 survey. Marked increases from 1971 levels are projected for 1973 and 1975, and to a lesser extent for 1974. For the most part, increases in construction are greater than in machinery and equipment, and this is one of the relatively few industries that show sustained strength in planned outlays on construction.

In the four firms for which data are comparable in the 1970 and 1971 surveys, capital investment intentions for 1971 were reduced by around 35 per cent during the period between the two surveys. Projected expenditures for 1973 were increased substantially, suggesting that some projects or retooling plans may have been deferred from 1971 to 1973. Total outlays for the three-year period are only moderately lower in the 1971 survey.

As noted in earlier reports, the breakdown, by purpose, of proposed capital investment by this group of companies is distorted somewhat by projected tooling costs that are included in the "Other" category. It will be noted that the proportion of total expenditures allocated to these costs is expected to increase substantially in 1972 and 1973 to close to 50 per cent from around 27 per cent in 1971. Increased shares are indicated also for modernization and replacement and for service facilities. Corresponding reductions are indicated for expansion projects and pollution control.

In all but one of the companies that reported, operations were below capacity in 1971, and this condition was expected to continue in 1972. The outlook for sales and profits was mixed, with as many companies anticipating decreases as increases.

Manufacturing - Other

A. Index of Capital Investment Intentions of all firms reporting - 27 (1971 = 100)

	1970	1971	1972	1973	1974	1975	1976
Construction	107.9	100.0	66.8	51.6	43.2	57.4	51.4
Machinery & Equipment	81.0	100.0	107.8	114.8	121.4	125.0	125.5
Total	88.1	100.0	97.0	98.8	101.9	107.8	106.8

B. Capital Investment Intentions of matched sample of firms - 23 (Millions of constant 1971 dollars)

	1971	1972	1973	Total
1970 Survey	343.4	361.4	373.7	1,078.5
1971 Survey	260.1	310.9	319.4	890.4

The companies surveyed in this sector manufacture a wide range of products such as electrical and electronic products, cement, glass, textiles, tobacco, rubber, and machinery and metal products. In 1970, the 27 companies covered in the survey accounted for around 29 per cent of total capital investment by this "Other Manufacturing" category. Because of this low degree of coverage in the survey, the results reported here should be viewed with particular caution and should not be

regarded as necessarily representing the investment pattern of this entire, heterogeneous industry sector.

Expenditures in 1971 by the group of companies surveyed were estimated at \$356 million, up appreciably from 1970 outlays. Because of steady increases in investment in machinery and equipment, expenditures by these companies are expected to remain roughly at 1971 levels throughout the period to 1976. Anticipated outlays on construction drop off sharply to around one-half of 1971 expenditures and remain in that area through to 1976. The sustained investment in machinery and equipment is due largely to the inclusion in this category of the output of some of the companies, such as computer manufacturers, whose products are frequently leased rather than sold to the user and are regarded as capital equipment.

Among the 23 companies covered in both of the two latest surveys, capital investment intentions for each of the years 1971, 1972, and 1973 were reduced substantially during 1971. The total for the three-year period was close to 20 per cent lower at the time of the 1971 survey than a year earlier. For those companies in the matched sample, a substantial increase in investment is planned for 1972 compared with 1971, but the anticipated 1972 expenditure is still well below the figures projected in the 1970 survey for either 1971 or 1972. Since between 30 and 40 per cent of the capital investment indicated for this diverse group of companies represents product capitalization, as outlined above, an assessment of survey results, in terms of the purpose for which expenditures are planned, is not very meaningful for these companies.

A substantial majority of the companies reported they were operating below capacity in 1971, and little change was anticipated in 1972. Most of them expect, however, that both *sales* and *profits* will show increases in 1972 and 1973.

Mining

A. Index of Capital Investment Intentions of all firms reporting - 20 (1971 = 100)

	1970	1971	1972	1973	1974	1975	1976
Construction	66.3	100.0	90.8	47.3	25.1	14.7	10.1
Machinery & Equipment	72.0	100.0	101.9	54.9	33.1	25.1	20.7
Total	69.2	100.0	96.5	51.1	29.0	19.7	15.1

B. Capital Investment Intentions of matched sample of firms - 14 (Millions of constant 1971 dollars)

	1971	1972	1973	Total
1970 Survey	404.1	431.5	211.4	1,047.0
1971 Survey	423.2	485.4	272.2	1,180.8

The mining companies in the survey are engaged in the mining of asbestos, coal and potash, as well as metals. On the basis of 1970 figures, they are estimated to represent virtually full coverage -- 98 per cent -- of the capital expenditures of the Canadian mining industry as a whole.

Capital investment of around \$860 million was estimated by the survey companies in 1971, an increase of more than 40 per cent over expenditures in 1970. A moderate reduction is anticipated in 1972, followed by sharply lower levels of investment, relative to 1971, for the balance of the survey period.

The matched sample of 14 survey firms indicates that investment intentions for the period from 1971 to 1973 were revised upwards considerably during the past year. Moreover, in contrast to the moderate decline indicated in 1972 for the entire group of companies surveyed, the firms in the matched sample expect a substantial increase in 1972. As noted in previous reports, this pattern of apparent reduction in levels of forward medium-term capital investment, followed by upward revisions as time progresses, has been rather typical of the mining industry. This year, however, the reduction appears one year earlier and is more marked than in previous surveys.

Almost 80 per cent of the expenditures reported for 1971 in the current survey were planned for expansion, with the proportion dropping to around two-thirds for the next two years. Outlays for modernization and replacement are expected to increase from around 15 per cent of total expenditures in 1971 to about 25 per cent in 1973. Investment in facilities for pollution abatement is also expected to increase.

Almost one-half of the mining firms surveyed reported that they were operating below *capacity* in 1971, but the majority of them expect to be at full *capacity* in 1972. Most of them anticipate increases in 1972 and 1973 in both domestic and export *sales* and look for *profit* increases as well in the next two years.

Main concerns expressed by the mining industry related to government policies -- both federal and provincial -- in fields such as taxation, foreign investment and the location of processing facilities, as well as to economic and monetary conditions in foreign markets.

Oil and Gas

A. Index of Capital Investment Intentions of all firms reporting - 23 (1971 = 100)

	1970	1971	1972	1973	1974	1975	1976
Construction	79.4	100.0	110.6	124.0	118.4	110.7	110.1
Machinery & Equipment	90.6	100.0	106.6	98.1	86.2	83.7	81.7
Total	84.7	100.0	108.7	111.8	103.3	98.0	96.8

B. Capital Investment Intentions of matched sample of firms - 17 (Millions of constant 1971 dollars)

	1971	1972	1973	Total
1970 Survey	795.9	761.6	768.8	2,326.3
1971 Survey	810.7	905.0	921.2	2,636.9

The companies surveyed in this industry range from those concerned only with the discovery and production of oil and gas to the fully integrated companies that are also engaged in refining and marketing and in the production of petrochemicals. Direct comparison with

figures in *Private and Public Investment in Canada* is not possible, but the survey is estimated to cover a major proportion of capital investment in the oil and gas industry.

The survey companies planned to spend over \$900 million in 1971 -- a sizeable increase over 1970. Further increases are projected for the next two years, with most of the increases occurring in construction which includes well drilling.

Dollar figures for the group of firms surveyed in both 1970 and 1971 show that, during the past year, planned expenditures were increased moderately for 1971 and quite substantially for 1972 and 1973.

Expenditures on expansion remain steady at around 62 per cent of total investment during the 1971 to 1973 period. In 1972 and 1973, some shift is indicated from outlays for modernization and replacement to a marked percentage increase in facilities for pollution abatement. This trend towards increased expenditure intentions for control of pollution was noted also in the 1970 survey.

All of the companies in the survey anticipate increases in both domestic and export sales, together with higher profits, in 1972 and 1973.

Particular concern was expressed in this industry over possible shifts in policy regarding foreign ownership and over some of the changes proposed in taxation and competition policy.

Oil and Gas Transmission

A. Index of Capital Investment Intentions of all firms reporting - 10 (1971 = 100)

	1970	1971	1972	1973	1974	1975	1976
Construction	49.4	100.0	113.4	91.7	76.7	95.2	62.2
Machinery & Equipment	136.2	100.0	119.7	100.9	136.5	194.8	125.2
Total	63.8	100.0	114.4	93.3	87.0	112.2	73.0

B. Capital Investment Intentions of matched sample of firms - 8 (Millions of constant 1971 dollars)

	1971	1972	1973	Total
1970 Survey	449.5	352.5	350.0	1,152.0
1971 Survey	451.0	516.6	420.2	1,387.8

The group of companies surveyed in this industry includes the major oil and gas pipeline firms and the larger gas distribution utilities. Capital expenditures by these companies are estimated at around \$465 million in 1971, up sharply from 1970. For this industry, too, direct comparison is not possible with investment reported in *Private and Public Investment in Canada*.

A further increase in expenditures is planned for 1972, and again in 1975, with outlays in the other years of the survey period running considerably below the rather high 1971 levels. Except in 1972, all of the increased expenditures are for machinery and equipment.

During the past year, the firms comprising the matched sample revised their capital expenditure intentions sharply upward by close to 50 per cent for 1972, and by 20 per cent for 1973.

Virtually all of the investment by the survey firms is for expansion of *capacity*.

About one-half of these firms reported that they operated below *capacity* in 1971, but most of them expect to be at *capacity* in 1972. All of them anticipate increased *sales* and *profits* in 1972 and 1973.

In this regulated industry, most of the concern expressed was over the time involved awaiting the decisions of the regulatory authorities.

Transportation and Storage

A. Index of Capital Investment Intentions of all firms reporting - 11 (1971 = 100)

	1970	1971	1972	1973	1974	1975	1976
Construction	88.8	100.0	92.1	83.4	72.1	66.4	61.5
Machinery & Equipment	111.3	100.0	80.9	84.8	97.5	103.9	56.3
Total	99.9	100.0	86.6	84.1	84.6	84.9	59.0

B. Capital Investment Intentions of matched sample of firms - 8 (Millions of constant 1971 dollars)

	1971	1972	1973	Total
1970 Survey	577.9	618.5	588.2	1,784.6
1971 Survey	544.7	469.4	476.5	1,490.6

This industry group includes airlines, railways, motor transport companies, steamship lines, city transit systems, and grain elevators. The companies surveyed estimated 1971 capital expenditures at around \$600 million, the same as in 1970. Investment is expected to decline substantially in 1972 and then to remain steady at that level through 1975. This may be due, at least in part, to a trend towards leasing rather than purchasing some large capital equipment.

In the matched group of firms, there was a moderate reduction during the past year in planned expenditures for 1971 and a sharp cutback in projected outlays in 1972 and 1973.

The largest proportion of capital investment by the survey firms is for modernization and replacement, with almost all of the remainder allocated to expansion. Little variation is indicated for the 1971 to 1973 period.

A number of the firms reported that they were operating at less than *capacity* in 1971, but only one expected to be below *capacity* in 1972. The majority of them expected increased *sales* in 1972 and 1973, but the *profit* outlook was mixed, with some expecting an increase and some a decrease, and some anticipating no change.

Telecommunications

A. Index of Capital Investment Intentions of all firms reporting - 10 (1971 = 100)

	1970	1971	1972	1973	1974	1975	1976
Construction	99.7	100.0	111.7	115.0	119.9	122.0	122.3
Machinery & Equipment	84.2	100.0	107.0	110.5	116.4	120.2	124.9
Total	89.2	100.0	108.5	112.0	117.5	120.8	124.0

B. Capital Investment Intentions of matched sample of firms - 10 (Millions of constant 1971 dollars)

	1971	1972	1973	Total
1970 Survey	808.9	858.5	894.5	2,561.9
1971 Survey	792.9	860.1	887.9	2,540.9

This industry group is comprised of telephone, telegraph, and broadcasting companies. Coverage by the survey is estimated at over 90 per cent of total capital investment in the industry. Expenditures of about \$790 million were planned for 1971, representing an increase of about 12 per cent over 1970. The outlook is for moderate annual increases through to 1976, fairly evenly divided between construction and machinery/equipment.

The same firms were in the 1970 survey and the dollar-figure comparison reveals a small reduction during the past year in capital expenditure intentions for 1971 and 1973. The total for the 1971 to 1973 period remains essentially unchanged, however, from the 1970 survey.

The allocation by purpose of the proposed investment remains virtually unchanged as well, at around 66 per cent for expansion, 31 per cent for modernization and replacement, and 3 per cent for services.

All of the firms reported that their facilities were operating at *capacity* and they expected to continue to do so in the coming year. They expect increases in *sales* in both 1972 and 1973, but only one-half of those who reported expect *profits* to increase during the period.

The main concern expressed by these companies was their ability to raise sufficient capital, within a regulated rate structure, to provide a desirable level of service and to keep pace with new technology.

Power Utilities

A. Index of Capital Investment Intentions of all firms reporting - 15 (1971 = 100)

	1970	1971	1972	1973	1974	1975	1976
Construction	98.7	100.0	87.5	85.0	87.9	93.7	103.5
Machinery & Equipment	88.6	100.0	97.0	100.1	101.8	102.9	110.4
Total	95.1	100.0	90.7	90.1	92.6	96.8	105.7

B. Capital Investment Intentions of matched sample of firms - 11 (Millions of constant 1971 dollars)

	1971	1972	1973	Total
1970 Survey	1,693.2	1,423.2	1,364.1	4,480.5
1971 Survey	1,583.9	1,437.5	1,435.3	4,456.7

Companies in this group are engaged in the production of electric power, and the survey is considered to provide full coverage of the industry. Capital investment in 1971 was estimated at \$1.7 billion, up about 5 per cent from 1970. Expenditures are projected to decline, however, in 1972 and to remain below 1971 levels through to 1976, when a small increase of about 6 per cent is indicated. The interim reductions are planned in construction, with outlays on machinery and equipment expected to remain close to those estimated for 1971.

From a review of the dollar figures, it will be noted that over \$100 million was removed during the past year from planned 1971 expenditures but that a substantial portion of the amount was added to 1972 and 1973 estimates.

In the current survey, a somewhat higher proportion of capital investment -- around 95 per cent -- is allocated to expansion than in the 1970 survey. An increase is noted also for modernization and replacement, while expenditures on research facilities are expected to drop from over 2 per cent in 1971 to zero in 1973.

Four of the reporting firms had operated below capacity in 1971, but only one expected to have spare capacity in the year ahead. All anticipate increased sales in 1972 while a few foresee a downturn in 1973. Among the relatively few firms that expressed a view on profits, the outlook was mixed.

Concern was expressed particularly over rising operating costs, control of pollution, ability to raise adequate capital to meet ever-increasing needs for electricity, and new technology in the generation of power.

Trade, Finance and Other Commercial

A. Index of Capital Investment Intentions of all firms reporting - 20 (1971 = 100)

	1970	1971	1972	1973	1974	1975	1976
Construction	81.8	100.0	96.1	81.0	65.4	43.0	39.7
Machinery & Equipment	100.2	100.0	140.8	145.6	135.4	109.6	88.9
Total	89.4	100.0	114.6	107.6	94.9	71.7	60.8

B. Capital Investment Intentions of matched sample of firms - 15 (Millions of constant 1971 dollars)

	1971	1972	1973	Total
1970 Survey	241.6	239.3	196.0	676.9
1971 Survey	199.0	219.5	205.5	624.0

Included in this sector are banks, department stores, chain stores, and other firms engaged in a variety of commercial services. Because of the wide range of companies represented in this group, the 20 companies in the survey accounted for only 16 per cent of the capital investment of the sector in 1970. On this account, and because of the heterogeneous nature of the sector, the survey results may not be very representative of the entire group and should be interpreted accordingly.

The planned investment of the survey firms in 1971 was just under \$300 million, representing an increase over 1970 of more than 10 per cent. A further increase of almost 15 per cent is estimated for 1972, followed then by quite sharp projected declines, especially after 1973, for the balance of the survey period. Expenditures on machinery and equipment are expected to remain well above 1971 levels throughout most of the period, but the outlook for construction is very weak.

During the past year, the 15 firms in the matched sample reduced substantially their planned expenditures for 1971 and 1972. A small increase is shown for 1973 but the total for the three-year period is around 8 per cent lower than planned at the time of the 1970 survey.

All the reporting firms anticipate sales and profit increases in 1972 and 1973.

Universities

A. Index of Capital Investment Intentions of all universities reporting - 31 (1971 = 100)

	1970	1971	1972	1973	1974	1975	1976
Construction	95.3	100.0	110.6	97.5	97.8	71.5	57.2
Machinery & Equipment	90.1	100.0	105.7	87.3	93.4	81.7	74.3
Total	94.2	100.0	109.5	95.7	95.6	73.7	61.0

B. Capital Investment Intentions of matched sample of universities - 23 (Millions of constant 1971 dollars)

	1971	1972	1973	Total
1970 Survey	296.3	245.0	314.7	856.0
1971 Survey	199.2	198.3	196.4	593.9

Universities from coast to coast were included in the survey. In 1970, they accounted for around 64 per cent of the capital investment made by all universities in Canada. Expenditures by the universities surveyed were estimated at \$250 million in 1971, up moderately from 1970. A further increase of almost 10 per cent is planned for 1972, followed by moderately lower levels of investment in 1973 and 1974 and by sharp declines in 1975 and 1976. The pattern of projected outlays was quite similar for construction and machinery/equipment.

A downward revision during the past year of about one-third is shown for the group of 23 universities covered in both the 1970 and 1971 surveys. Sharp cut-backs are indicated for each of the years 1971, 1972 and 1973.

Governments

A. Index of Capital Investment Intentions of all governments reporting - 10 (1971 = 100)

	1970	1971	1972	1973	1974	1975	1976
Construction	82.7	100.0	102.2	103.9	96.8	92.0	88.7
Machinery & Equipment	84.3	100.0	100.5	114.3	113.4	103.7	95.7
Total	83.0	100.0	101.9	105.7	99.6	94.0	89.6

B. Capital Investment Intentions of matched sample of governments - 8 (Millions of constant 1971 dollars)

	1971	1972	1973	Total
1970 Survey	2,999.1	3,029.9	3,029.5	9,058.5
1971 Survey	2,787.0	2,848.7	3,077.7	8,713.4

Capital investment intentions were provided for this survey by the federal government and most of the provincial governments. Some of the latter also provided information on capital spending plans of municipalities. This is the first survey in which sufficient information was available on the breakdown between construction and machinery/equipment to permit indexes of these two components to be reported.

Projected government capital expenditures included in this year's survey amounted to over \$3.6 billion for 1971, representing a substantial increase over 1970. Expenditures are expected to increase slightly in 1972 and 1973, and then to decline gradually through to 1976. The outlook is for larger increases -- and smaller declines -- in machinery and equipment than in construction.

Comparable dollar data for both the 1970 and 1971 surveys were available for only eight of the governments. In this group, expenditure intentions were revised downward during the past year for 1971 and 1972, and only slightly upward for 1973. Total projected outlays for the three-year period were lower at the time of the current survey than a year earlier.

APPENDIX

The information requested in this survey remained essentially the same as in the one conducted in October 1970. Coverage was increased moderately from a total of 211 business firms, universities, and governments to 241 in the current survey.

As in recent surveys, participants were requested to provide us with either their projections of capital expenditures on the basis of 1971 dollars or, alternatively, to advise us of the allowance provided in their projections for price changes from 1971 levels. A number of the officials interviewed still expressed reservations as to the accuracy with which price assumptions were taken into account in their estimates as they were being compiled. Accordingly, the data presented in this report should be regarded as an approximation rather than an accurate indication of constant dollar estimates.

The following table presents in some detail a description, by industry and sector, of the survey results by the main purpose of the proposed investment. An increased number of participants provided this information this year. However, since projected investment (especially by 1974) falls below actual levels that can realistically be anticipated, the information on the purpose of the outlays is presented only through 1973. As mentioned earlier, a number of capital projects are likely to represent a combination of expansion, modernization and replacement, and may also include facilities for purposes such as research and development and pollution control. When overlap occurred, and when the expenditure could not be realistically broken down by the various purposes it was designed to serve, companies were asked to list the expenditure under the heading that represented the main purpose of the facility. Hence this classification of investment by purpose should not be regarded as a precise allocation of all capital expenditure intentions provided by the survey, but as a rough indicator of shifts in the main purposes of investment.

ALLOCATION BY PURPOSE
OF
CAPITAL INVESTMENT INTENTIONS OF BUSINESS FIRMS

	Expansion	Modernization and Replacement	Services	Research and Development	Pollution Abatement	Other	Total
<i>Manufacturing -- Total</i>							
1971 --	22.9	2.0	1.1	7.3	9.8	100.0	
1972 --	25.9	2.9	1.1	5.9	12.9	100.0	
1973 --	26.8	3.0	1.1	4.9	13.4	100.0	
<i>Food & Beverages</i>							
1971 --	31.2	1.6	1.4	3.8	1.4	100.0	
1972 --	31.1	1.6	3.4	3.5	1.0	100.0	
1973 --	30.0	1.1	1.2	0.8	0.8	100.0	
<i>Pulp & Paper</i>							
1971 --	53.2	31.6	1.6	0.2	11.5	1.9	100.0
1972 --	41.5	45.6	1.8	0.2	8.3	2.6	100.0
1973 --	48.9	40.0	1.5	0.1	6.8	2.7	100.0
<i>Primary Metals</i>							
1971 --	67.8	19.1	2.0	0.1	8.4	2.6	100.0
1972 --	65.6	20.0	3.3	0.4	8.4	2.3	100.0
1973 --	60.5	26.3	2.8	--	7.7	2.7	100.0
<i>Chemicals</i>							
1971 --	75.3	14.2	3.0	3.8	3.1	0.6	100.0
1972 --	69.6	14.1	5.1	4.3	6.0	0.9	100.0
1973 --	71.5	14.5	4.0	5.5	3.8	0.7	100.0
<i>Transportation Equipment</i>							
1971 --	46.2	10.0	3.4	0.2	13.3	26.9	100.0
1972 --	29.9	13.5	3.7	1.1	4.8	47.0	100.0
1973 --	30.8	13.5	4.9	0.5	1.2	49.1	100.0
<i>Other Manufacturing</i>							
1971 --	40.4	22.6	1.5	2.2	1.1	32.2	100.0
1972 --	40.7	21.8	2.4	0.6	1.9	32.6	100.0
1973 --	33.3	21.5	4.2	0.6	2.0	38.4	100.0

<u>Mining</u>							
1971 --	79.4	14.8	0.8	1.2	3.2	0.6	100.0
1972 --	67.6	27.8	0.4	1.4	2.2	0.6	100.0
1973 --	66.3	25.1	0.8	1.6	4.5	1.7	100.0
<u>Oil & Gas</u>							
1971 --	62.5	15.8	0.4	0.3	1.9	19.1	100.0
1972 --	62.5	12.8	0.4	0.3	4.9	19.1	100.0
1973 --	62.0	12.8	0.3	0.2	6.7	18.0	100.0
<u>Oil & Gas Transmission</u>							
1971 --	96.0	3.2	--	0.5	--	0.3	100.0
1972 --	95.2	4.1	--	0.4	--	0.3	100.0
1973 --	93.3	5.6	--	0.6	--	0.5	100.0
<u>Transportation & Storage</u>							
1971 --	44.1	55.8	--	0.1	--	0.1	100.0
1972 --	41.7	58.1	--	0.2	--	0.2	100.0
1973 --	42.7	57.0	--	0.3	--	0.3	100.0
<u>Communications</u>							
1971 --	65.6	31.2	3.2	--	--	--	100.0
1972 --	66.2	31.2	2.6	--	--	--	100.0
1973 --	66.1	32.2	1.7	--	--	--	100.0
<u>Power Utilities</u>							
1971 --	94.1	3.2	0.3	2.4	--	--	100.0
1972 --	94.5	4.5	0.3	0.7	--	--	100.0
1973 --	95.6	4.1	0.3	--	--	--	100.0
<u>Trade, Finance & Other Commercial</u>							
1971 --	69.6	30.0	0.4	--	--	--	100.0
1972 --	66.5	32.7	0.6	--	0.2	--	100.0
1973 --	67.6	30.4	1.9	--	0.1	--	100.0
<u>TOTAL BUSINESS</u>							
1971 --	69.6	21.1	1.1	0.8	2.4	5.0	100.0
1972 --	66.3	23.2	1.3	0.6	2.5	6.1	100.0
1973 --	65.0	23.8	1.3	0.4	2.7	6.8	100.0

SURVEY COVERAGE
Compared with
NATIONAL ACCOUNTS

	Construction	Machinery and Equipment	Total
	(Millions of dollars)		

A. TOTAL CAPITAL EXPENDITURES

National Accounts*

Total private and public capital expenditures in 1970	11,721	6,256	17,977
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Survey

Capital expenditures in 1970 of all organizations included in survey	5,760	3,871	9,631
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Coverage as percentage of total capital expenditures	49%	62%	54%**
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B. BUSINESS

National Accounts*

Total private and public capital expenditures in 1970	11,721	6,256	17,977
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less government outlays	2,940	325	3,265
less housing	3,537	--	3,537
less institutions	345	96	441
less agriculture and fishing	227	619	846

Total business capital expenditures in 1970	4,672	5,216	9,888
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Survey

Capital expenditures in 1970 of all business organizations included in survey	3,083	3,314	6,397
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Coverage as percentage of business capital expenditures	66%	64%	65%**
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* National Accounts data from Statistics Canada, and Department of Industry, Trade and Commerce, *Private and Public Investment in Canada: Outlook 1971, Mid-Year Review*, Catalogue No. 61-206 (Ottawa: Information Canada, 1971), Tables 1 and 9.

** The small (1%) difference in coverage between National Accounts totals and those of *Private and Public Investment in Canada* is due to a data adjustment as explained in Table 9 of the above publication.

The preceding table indicates that the coverage provided by this survey represented 65 per cent of total business capital formation in 1970 for the categories surveyed and that it accounted for 54 per cent of all private and public investment in Canada.

Earlier in this report, mention was made of a new procedure that was introduced this year for the preparation of some of the indexes. In previous capital investment reports, in cases where some organizations were unable to provide a breakdown of their planned expenditures between construction and machinery/equipment and so reported overall intentions only, no data were entered for these two categories, and the index of total capital investment intentions did not represent a simple total of the construction and machinery/equipment expenditures that were used in the preparation of the indexes for the latter two categories of investment. In a few cases, the index of total expenditures fell outside the range of the two subindexes and gave rise to difficulty in interpretation of the results. To help overcome this problem, when a breakdown between construction and machinery/equipment was not available in this year's data, an average breakdown for the sector represented was incorporated into the data for the organization not reporting the breakdown, and this average breakdown is reflected in the various construction and machinery/equipment indexes. Using this procedure, it will be noted in the final table that the number of organizations included is identical for the Construction, Machinery and Equipment, and Total indexes.

The final table presents summaries of all indexes included in this report. Although 1970 is the latest year for which final capital investment data were available, we believe, as noted earlier, that indexes on the basis of $1971 = 100$ would be most useful. Since preliminary actual figures for 1971 could be estimated reasonably closely at the time of the survey, the indexes presented here are on the basis of $1971 = 100$, with 1970 results appearing in appropriate relationship.

As pointed out in one of the footnotes to this table and also to the table of indexes on page 5, because the number of organizations providing estimates is not constant throughout the period, the index numbers have been built up from overlapping year-to-year comparisons rather than from simple totals. The figures used for any given year cover the same firms as in the immediately preceding year. Thus, although the coverage of the index is narrower in certain years, there is no distortion arising from lack of figures for some organizations.

SUMMARY INDEXES OF CAPITAL INVESTMENT INTENTIONS

(1971 = 100)

	1970	1971	1972	1973	1974	1975	1976	1970	1971
<u>Construction</u>									
Manufacturing - Total	109.5	100.0	75.8	91.2	49.9	40.5	36.8	102.1	100.0
Food & Beverages	129.4	100.0	81.4	78.1	65.6	58.5	41.2	99.8	100.0
Pulp & Paper	70.7	100.0	60.9	106.9	51.2	38.5	33.1	106.9	100.0
Primary Metals	173.6	100.0	129.9	111.5	53.7	51.1	82.4	87.5	100.0
Chemicals	140.1	100.0	76.3	79.2	41.2	13.1	9.6	123.0	100.0
Transportation Equipment	148.2	100.0	135.7	186.1	108.3	213.8	103.2	178.3	100.0
Other	107.9	100.0	66.8	51.6	43.2	57.4	51.4	81.0	100.0
Mining	66.3	100.0	90.8	47.3	25.1	14.7	10.1	72.0	100.0
Oil & Gas (1)	79.4	100.0	110.6	124.0	118.4	110.7	110.1	90.6	100.0
Oil & Gas Transmission (2)	49.4	100.0	113.4	91.7	76.7	95.2	62.2	136.2	100.0
Transportation & Storage	88.8	100.0	92.1	83.4	72.1	66.4	61.5	111.3	100.0
Telecommunications	99.7	100.0	111.7	115.0	119.9	122.0	122.3	84.2	100.0
Power Utilities	98.7	100.0	87.5	85.0	87.9	93.7	103.5	88.6	100.0
Trade, Finance & Other Commercial	81.8	100.0	96.1	81.0	65.4	43.0	39.7	100.2	100.0
Total Business	86.7	100.0	94.9	90.0	80.1	79.8	76.7	93.4	100.0
Universities	95.3	100.0	110.6	97.5	97.8	71.5	57.2	90.1	100.0
Governments	82.7	100.0	102.2	103.9	96.8	92.0	88.7	84.3	100.0
Survey Total	85.2	100.0	98.6	96.4	88.0	85.0	81.2	92.1	100.0
Organizations Included (3)	239	241	241	230	226	219	205	239	241

Note: As far as possible, allowances for price changes were removed from the reported data before constructing the foregoing indexes. As noted earlier, this accounts for the difference between business capital investments for 1972 that are reported in this publication and those reported earlier by the Department of Industry, Trade and Commerce for the joint survey. Fuller commentary relating to price changes appears in the Appendix.

(1) Includes production and refining.

(2) Includes pipelines and distribution.

(3) Because the number of organizations providing estimates is not constant throughout the period, the index numbers have been built up from overlapping year-to-year comparisons rather than from simple totals. The figures used for any given year cover the same firms as in the immediately preceding year. Thus, although the coverage of the index is narrower in certain years, there is no distortion arising from lack of figures for some organizations.

SUMMARY INDEXES OF CAPITAL INVESTMENT INTENTIONS (cont'd.)

(1971 = 100)

1972	1973	1974	1975	1976	1970	1971	1972	1973	1974	1975	1976
<u>Machinery and Equipment</u>						<u>Total</u>					
108.4	100.6	92.4	79.6	79.6	104.3	100.0	98.7	97.7	79.8	68.0	66.8
103.9	92.1	83.5	72.6	61.2	108.7	100.0	97.2	87.9	78.1	68.4	54.9
98.0	87.8	92.2	68.2	56.1	93.1	100.0	83.9	95.5	76.2	56.6	47.2
112.2	94.2	62.3	50.6	63.6	98.6	100.0	114.5	96.4	61.2	50.6	66.0
155.3	119.8	112.5	70.7	88.1	132.8	100.0	109.7	96.3	69.9	36.0	40.2
96.3	127.8	119.3	121.0	104.3	174.4	100.0	101.4	135.3	118.3	130.7	104.4
107.8	114.8	121.4	125.0	125.5	88.1	100.0	97.0	98.8	101.9	107.8	106.8
101.9	54.9	33.1	25.1	20.7	69.2	100.0	96.5	51.1	29.0	19.7	15.1
106.6	98.1	86.2	83.7	81.7	84.7	100.0	108.7	111.8	103.3	98.0	96.8
119.7	100.9	136.5	194.8	125.2	63.8	100.0	114.4	93.3	87.0	112.2	73.0
80.9	84.8	97.5	103.9	56.3	99.9	100.0	86.6	84.1	84.6	84.9	59.0
107.0	110.5	116.4	120.2	124.9	89.2	100.0	108.5	112.0	117.5	120.8	124.0
97.0	100.1	101.8	102.9	110.4	95.1	100.0	90.7	90.1	92.6	96.8	105.7
140.8	145.6	135.4	109.6	88.9	89.4	100.0	114.6	107.6	94.9	71.7	60.8
104.3	97.9	95.0	92.3	85.4	90.0	100.0	99.6	93.9	87.5	86.0	81.1
105.7	87.3	93.4	81.7	74.3	94.2	100.0	109.5	95.7	95.6	73.7	61.0
100.5	114.3	113.4	103.7	95.7	83.0	100.0	101.9	105.7	99.6	94.0	89.6
103.8	100.2	97.7	93.9	86.7	87.8	100.0	100.6	97.9	91.7	88.3	83.2
241	230	226	219	205	239	241	241	230	226	219	205

